ABSTRACT OF THE DISCLOSURE

Sensitivity of a velocity modulation device is increased and noise such as a leakage magnetic field and a leakage electric field from the device are reduced to thereby lower power consumed by the device. A cathode ray tube device and a television set each include a velocity modulation device on a cathode side of a deflection yoke. All or part of the circumference of a velocity modulation coil to modulate scan beam velocity is covered with material having an initial permeability of at least 10 at 2 MHz.